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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/052,094	01/18/2002	David Marples	1365	5824

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EXAMINER

DUONG, OANH L

ART UNIT	PAPER NUMBER
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2155

DATE MAILED: 10/30/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/052,094

Applicant(s)

MARPLES ET AL.

Examiner

Oanh L. Duong

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 18 January 2002.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Poier et al (Poier) (US 2002/0124090 A1) in view of Murakawa (US 2001/0020273 A1).

Regarding claim 1, Poier teaches a method performed by a hub for enabling a first device to allow communications from a second device wherein the first device is separated from the second device by access blocking apparatus (e.g., see fig. 3), said method comprising terminating a virtual pipe from the first device (e.g., see page 1 paragraph 10), receiving communication originated by the second device and addressed to said IP address (e.g., see page 5 paragraph 51), routing the communications addressed to said IP address to the virtual pipe (e.g., see col. page 3 paragraph 42 and pages 4-5 paragraph 49), and tunneling the communications over the virtual pipe to the first device (e.g., see page 2 paragraph 15). Poier does not explicitly teach assigning an IP address as claimed. However, Murakawa teaches assigning an IP address to the first device and associating the IP address with the virtual pipe (e.g., see page 4 paragraphs 93-98). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include assigning an IP address to the communication device in Poier as taught by Murakawa because such

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assigning step would designate the IP address of the external communication device from a tunnel IP packet. Thus, security level would have improved.

Regarding claim 2, Poier teaches receiving second communications originated by the first device through the virtual pipe, and routing the second communications from the first device to the second device (e.g., see pages 4-5 paragraphs 49 and 51).

Regarding claim 3, Poier teaches encrypting the communications prior to tunneling the communications over the virtual pipe (e.g., see page 2 paragraph 15).

Regarding claim 4, Poier teaches receiving a plurality of communications originated by a plurality of second devices and addressed to the IP address, routing the plurality of communications addressed to the IP address to the virtual pipe, and tunneling the plurality of communications over the virtual pipe to the first device (e.g., see page 5 paragraph 51).

Regarding claim 5, Poier teaches establishing an access control list to control access to the first device, and based on the access control list, routing the communications from the second device to the first device only if the second device has permission to access the first device (e.g., see pages 4-5 paragraph 49).

Regarding claim 6, Poier teaches terminating a second virtual pipe from the second device (e.g., see page 1 paragraph 10). Poier does not explicitly teach assigning IP address as claimed. However, Murakawa teaches assigning a second IP address to the second device pipe, and receiving the communications from the second device through the second virtual pipe (e.g., see page 4 paragraphs 93-98). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the

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invention was made to include assigning an IP address to the communication device in Poier as taught by Murakawa because such assigning step would designate the IP address of the external communication device from a tunnel IP packet. Thus, security level would have improved.

Regarding claim 7, Poier does not explicitly teach the IP addresses assigned to the first and second devices are private IP addresses. However, Murakawa teaches the IP addresses assigned to the first and second devices are private IP addresses (e.g., see page 4 paragraphs 93-98). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to apply the IP addresses in Poier as taught by Murakawa because such private IP addresses would allow communication device outside the private network to be accessible into the private network, which is configured with private IP addresses. Thus, external communication device can access to the private network configured with private IP addresses, ensuring security (Murakawa, page 4 paragraph 98).

Regarding claim 8, Poier teaches a system for enabling communications between a first device and a second communication device wherein said first device is separated from said second device by access blocking apparatus (e.g., see fig 3), said system comprising a secure hub (server 18), and virtual pipe between the first device and said secure hub (e.g., page 8 claim 2), and means for tunneling said communications over the virtual pipe to the first device (e.g., see page 2 paragraph 15). Poier does not explicitly teach assigning IP address as claimed. However, Murakawa teaches secure hub including a pool of available IP addresses from which an IP address

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can be assigned to the first device (e.g., see page 4 paragraphs 93-98), means for associating the assigned IP address with the virtual pipe (e.g., see page 3 paragraphs 68-72), means for routing communications from the second device and addressed to the first device to the virtual pipe (e.g., see page 3 paragraph 75). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include assigning an IP address to the communication device in Poier as taught by Murakawa because such assigning step would designate the IP address of the external communication device from a tunnel IP packet. Thus, security level would have improved.

Regarding claim 9, Poier teaches means for tunneling tunnels second communications over the virtual pipe from the first device, and wherein said means for routing routes the second communication to the second device (e.g., see page 8 claims 2 and 18).

Regarding claim 10, Poier teaches a virtual pipe between the second device and said secure hub, and wherein said means for associating associates a second IP address from the pool of available IP addresses with the second virtual pipe, and wherein said means for tunneling tunnel said communication from the second device through the second virtual pipe (e.g., see page 7 paragraph 83).

Regarding claim 11, Poier teaches an access control list to control access to the first device, and wherein, based on the access control list, said means for routing the communications from the second device to the first device routes the communications

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only if the second device has permission to access the first device (e.g., see pages 4-5 paragraph 49).

Regarding claim 12, Poier teaches a system for enabling communications to a first communication device through the public network from a second communication device, said first and second communication devices being separated by at least one security access blocking apparatus (e.g., see fig. 3), said system comprising a secure hub having routing and switching functionality (e.g., see page 2 paragraph 17 and page 6 paragraph 58) and pipe termination functionality (e.g., see page 1 paragraph 10) and having interface to said public network (e.g., see page 2 paragraph 15), and means for creating a virtual pipe between said secure hub and said first communication device for tunneling communication (e.g., see page 2 paragraph 15 and page 5 paragraph 52). Poier does not explicitly teach assigning an IP address as claimed. However, Murakawa teaches means for assigning an IP address to said first communication device and associating said IP address with said virtual pipe (e.g., see page 4 paragraphs 93-98). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include assigning an IP address to the communication device in Poier as taught by Murakawa because such assigning step would designate the IP address of the external communication device from a tunnel IP packet. Thus, security level would have improved.

Regarding claim 13, Poier teaches means for establishing said communication from said second communication device through said public network to said secure hub (e.g., page 7 paragraph 75).

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Regarding claim 14, Poier teaches means for establishing said communication from said second communication device includes means for defining a second virtual pipe (e.g., see page 7 paragraph 83).

Regarding claim 15, Poier teaches means for defining an access control list, said routing and switching functionality routing said communication from said second communication device to said virtual pipe only if such access is permitted by said access control list (e.g., see pages 4-5 paragraph 49).

### ***Conclusion***

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Oanh L. Duong whose telephone number is (703) 305-0295. The examiner can normally be reached on Monday- Friday, 8:00AM - 5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hosain T. Alam can be reached on (703) 308-6662. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.



O.D  
October 23, 2003



HOSAIN ALAM  
SUPERVISORY PATENT EXAMINER